

Facilitating Quality Installations

California Energy Commission
Building Industry Institute
ConSol

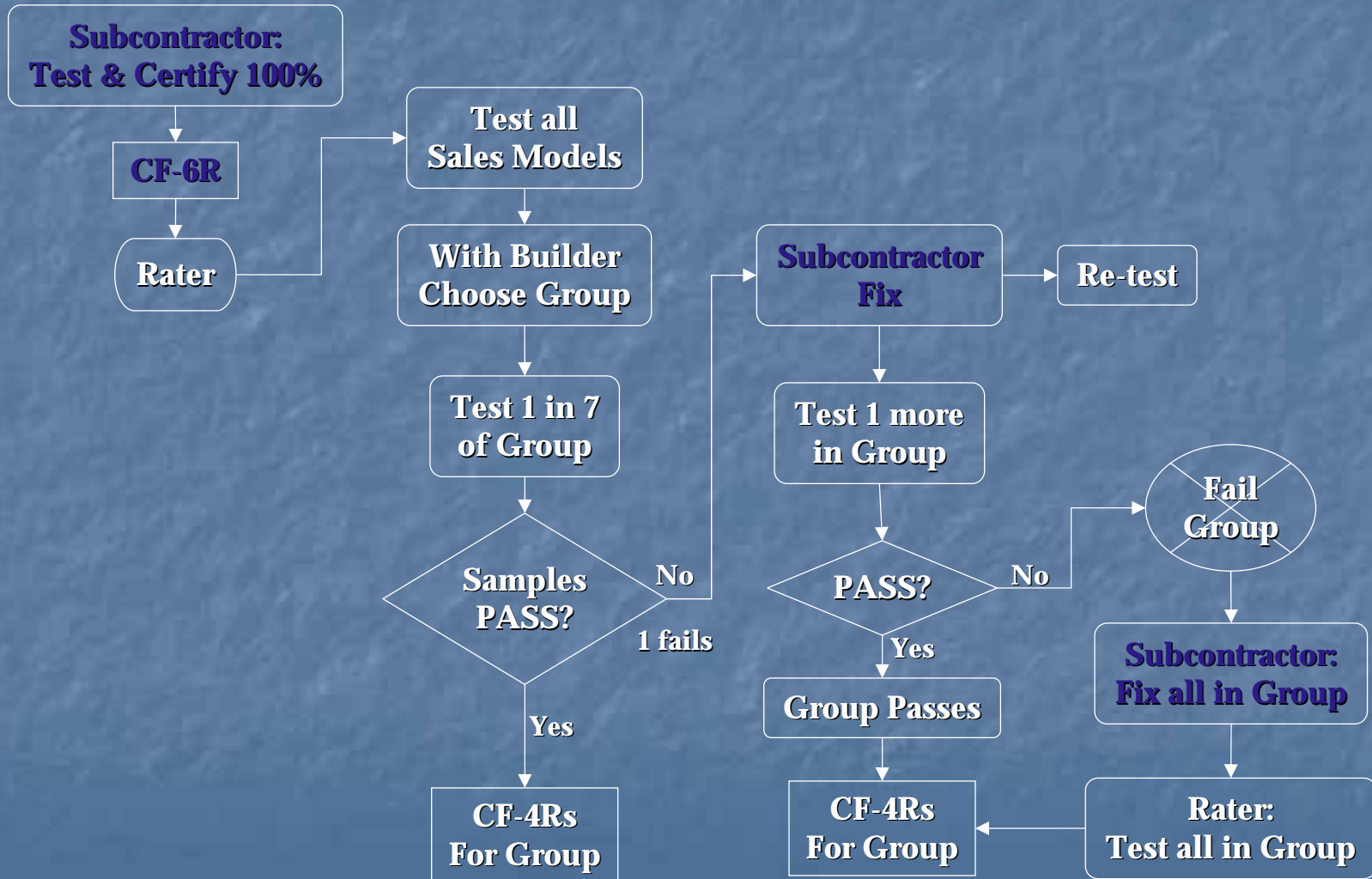
Goals

- Eliminate Typical Mistakes
- Facilitate Enforcement
- Encourage Quality / HERS Inspections
 - Removing Misconceptions
 - Explaining Benefits
 - Demonstration

Quality Installations

- Engineered HVAC Design
- Proper Airflow
- Lowered Duct Leakage
- Buried Ducts
- Refrigerant Charge / TXV
- Proper Insulation
- Tested House Infiltration

Inspection Procedures



ACCA Manual D

- Room by Room Loads
- Condenser Sizing
- Duct Layout
- Duct Sizing
 - Room Load
 - Friction Loss



Operating Conditions

- Refrigerant Charge

- Ambient Air
- Indoor Air
- Leakage
- Airflow

- TXV



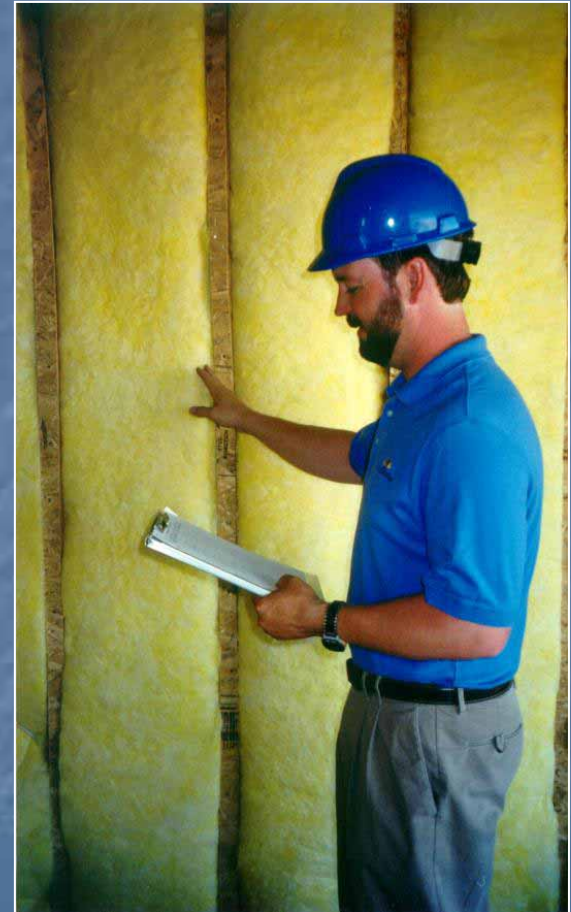
Tight Ducts

- 6% Fan Flow
- Typical 23%
- Cavities or Plenums
- Mechanical Connection
- Approved Sealant



Insulation

- Quality Installation
 - No Compression
 - Blown-In: Allow for settling
- Buried Ducts
- House Infiltration



Duct Improvements

